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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,771	07/17/2003	John Louis Janning	J5460.0009/P009-A	9160
24998	7590	09/05/2006	EXAMINER: LEE, GUIYOUNG	
DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			ART UNIT 2875	PAPER NUMBER

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/620,771	<b>Applicant(s)</b> JANNING, JOHN LOUIS	
	<b>Examiner</b> Guiyoung Lee	<b>Art Unit</b> 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Prelim./Amdt.***

1. Receipt is acknowledged of the Response filed 06/06/2006.
2. Claims 1-4 are pending, and independent claim 1 has been amended.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's argument that the reference to Harris does not teach a semiconductor shunt, a newly found reference to Sawka et al. (US 4,450,382) discloses a Zener diode as a semiconductor shunt being used for the series-wired light bulbs.

In response to applicant's argument that Wu reference does not disclose that the rectifier is used in the series-wired light string, a newly found reference to Kramer (3,789,211) discloses a half-wave rectifier being used for the series-wired light string. Further, a bridge rectifier for full wave rectification is known at the time of the invention, and Ray discloses the bridge rectifier.

The new ground of rejection follows.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris (US 5,453,664) in view of Sawka (US 5,345,147), further in view of Kramer (US 3,789,211).

5. Re claims 1-2 and 4: Harris discloses a series-wired light string that operates comprising a plurality of light bulbs (12 in Fig. 1), a plurality of light sockets (16), each light socket of said plurality of light sockets adapted to receive at least one light bulb (124) of said plurality of light bulbs, a plurality of voltage-responsive shunts (140 and 142), each shunt being electrically connected in parallel across a respective light socket to maintain the current passing through the light socket in the event that a light bulb is not illuminated or is missing from the light socket (col. 4, lines 24+), and a power source. Harris does not disclose a rectifier for rectifying an AC supply voltage for DC operation of the series wired light string. Kramer shows a single diode rectifier (Fig. 1), which is a half-wave rectifier, for rectifying an AC supply voltage for DC operation of the series-wired light string (Fig. 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ Kramer's single diode rectifier into Harris' light string in order to rectify AC supply voltage to DC supply voltage because of the advantage that the single diode rectifier can control intensity of the lamp road conveniently. Further, Harris does not teach that the voltage-responsive shunt is a single Zener diode shunt. However, Sawka shows a Zener diode (32) as a voltage-responsive shunt being used in the series-wired light string (See light bulbs L1 and L9 in Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute Sawka's Zener diode with Harris' voltage-responsive shunt because of the advantage that the Zener diode is self-cooled, thus avoiding need for a heat sink or auxiliary cooling system.

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6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris and Sawka in view of Kramer as applied to claim 1 above, and further in view of Ray (US 4,211,955).

7. Re claim 3: Kramer does disclose a single diode rectifier. Kramer does not disclose a bridge rectifier. However, the bridge rectifier was known at the time the invention was made, and Ray discloses a bridge rectifier (26 in Fig. 6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute Kramer's half-wave rectifier with Ray's bridge rectifier because of the advantage that the bridge rectifier can maintain the same polarity of output voltage for any polarity of the input voltage.

### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

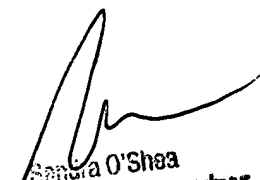
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guiyoung Lee whose telephone number is 571-272-2374. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LGY



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